APPENDIX A:

ESA Guidance and No Effect Design Criteria

Consultation Guidance for Washington State

Prepared in collaboration with National Marine Fisheries Service.

For use in Washington State only

For Responsible Entities under 24 CFR Part 58, & 24 CFR Part 50

General requirements	Legislation	Responsible Agency
Section 7(a) (2) of the Endangered Species Act (ESA) mandates that actions that are authorized, funded, or carried out by Federal agencies do not jeopardize the continued existence of plants and animals that are listed, or result in the adverse modification or destruction of designated critical habitat.	The Endangered Species Act of 1973; 16 U.S.C. 1531 et seq.	NMFS and USFWS (the Services)
Section 305(b)(2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires Federal agencies to consult with NOAA Fisheries on any action that they authorize, fund, or undertake that may adversely affect essential fish habitat (EFH).	Magnuson-Stevens Fishery Conservation and Management Act	NMFS only

Purpose

The purpose of this checklist is to assist HUD and HUD's responsible entities (REs) in meeting their obligations under the Endangered Species Act (ESA) for both Services, and the MSA with NMFS where necessary. The checklist is designed to help you determine whether a proposed project will have an effect on federally-listed species, designated critical habitat, or essential fish habitat, and the process to follow based on those effect determinations.

ESA Section 7 Consultation Requirements

The ESA directs all Federal agencies to utilize their authorities to conserve species listed as threatened or endangered (ESA Section 2(c)(1)), and to consult with the Services to ensure that their actions will not jeopardize listed species, or adversely modify habitat designated as critical for listed species.

The Services share responsibility for assisting federal agencies in implementing the ESA. The USFWS trust resources under the ESA include birds, amphibians, plants, insects, terrestrial reptiles, terrestrial mammals, most freshwater fish, and a few marine mammals and their critical habitats. NMFS ESA trust resources are the remainder of listed marine mammals, sea turtles, marine fish, anadromous fish such as salmon and steelhead and their critical habitats.

ESA Effects Determinations

First - Before Federal agencies (or REs) consult with the Services, they make a preliminary analysis of the likely direct and indirect effects of project activities and whether listed species and/or habitat will experience those effects. If yes, then the action "May Affect" and the Federal agency (or in this case, HUD or its RE) must consult, either formally or informally (guidance is below). If no species or critical habitat could be affected either positively or negatively, even temporarily, then a"No Effect" call may be reached.

To make this determination correctly, remember that the effects of the action (direct and indirect) are not limited to the immediate area involved in the action ("footprint" or project area). Instead, the effects of the action encompass all of the action's direct and indirect effects to the physical, chemical, and biological environment.

- Direct effects include, but are not limited to, sound, visual disturbance (e.g., lighting), and turbidity from disturbed land during construction.

- Indirect effects occur later in time (typically related to operation and maintenance) and may include, but are not limited to, air emissions, storm or process water discharges, and sources of sound and visual disturbance (e.g., lighting).

If other actions are caused by the proposed action (e.g., site access and staging, sourcing of materials, disposal of wastes, increased vehicle traffic), they must also be considered. Some actions may indirectly affect the pattern or rate of land use conversion or development, and those indirect effects must also be considered.

No Effect: There must be no connection between the effects of the action and any trust resources. This is a very high bar to meet, and very few actions that would take place in or near habitats that are occupied by listed species and/or have been designated as critical habitat would have truly no effect. However, if an agency does determine that an action would have no effect, the agency would document that determination in their project files, along with its supporting rationale, and no consultation with the Services is required. The Action agency or the RE are solely responsible for this determination and cannot defer responsibility to an external party. The Services rarely issue any correspondence for a no effect determination, except when there is strong disagreement about that determination.

Second **-** If an RE determines that an action in Western Washington *may affect* trust resources, it should proceed with consultation under the HUD Programmatic Consultation for Washington State by submitting documents showing the activity falls within this programmatic, to HUD-wa.wcr@noaa.gov. This means that if effects exceed the "no effect" threshold but are "not likely to adversely affect" or are "likely to adversely affect, consultation can proceed via the inbox and this programmatic.

In Eastern Washington, submit to:CRBO.ConsultationRequest.WCR@noaa.gov

"Not likely to adversely affect." When effects on species or critical habitat are expected to be insignificant, discountable, or wholly beneficial. The thresholds for reaching an NLAA determination are:

- ✔ *Discountable effects* are those extremely unlikely to occur. Based on the best available scientific and commercial data, and judgment, a person would not expect discountable effects to occur.

- ✔ *Insignificant effects* relate to the magnitude of the impact and should never reach the scale where "take" occurs. "Take" is defined to include "harass," and "harm." *Harm* can occur if habitat is altered in a manner that diminishes important species behavior, such as breeding, feeding, or sheltering, to the degree that it injures even a single individual of the species. *Harass* includes activities that alter an individual's behavior in a manner that increases the likelihood of it being injured. Based on best judgment, a person would not be able to meaningfully measure, detect, or evaluate insignificant effects.

- ✔ *Wholly beneficial effects* is very narrowly construed, and cannot be interpreted to mean "better than before," and cannot involve an analysis of net effects. All effects must be positive. If any adverse effect occurs, then the project is not wholly beneficial.

"Likely to adversely affect." If the expected effects of an action and its associated activities exceed any of the thresholds above, for even one individual or any feature of critical habitat, then the action is likely to adversely affect that trust resource. In the case of uncertainty, the benefit of the doubt must be given in favor of protecting the trust resources. IF the project is in Western Washington, submit your request for consultation under this programmatic at HUD-wa.wcr@noaa.gov. In Eastern Washington, submit to CRBO.ConsultationRequest.WCR@noaa.gov

Part A of this document explains all the steps necessary to determine if ESA consultation with NMFS is required.[8]

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8 Conference opinions are optional for effects on proposed critical habitat and proposed species, and candidate species. Reinitiation of consultation may be required if a new species is listed or critical habitat designated subsequent to the action.

Part A: Procedures for ESA Consultation with National Marine Fisheries Service

Step 1: Obtain Species List and Determine Critical Habitat

You must obtain a species list for the entire action area of your project. The ***action area*** encompasses all areas where the physical, chemical, or biological effects of the project and activities associated with the project will occur, not just effects within the construction footprint. Note that project effects include those from the presence, operation, and maintenance of the project, not merely construction effects. Examples include effects such as noise, air pollution, water quality, stormwater discharge, artificial lighting, and visual disturbances.

For NMFS species and designated critical habitat go to:

List of ESA Species on the West Coast: https://www.fisheries.noaa.gov/species-directory/threatened-endangered?species_title=&field_species_categories_vocab_target_id=All&field_species_status_value=All&field_region_vocab_target_id=1000001126

Species Maps & GIS Data:
https://archive.fisheries.noaa.gov/wcr/maps_data/Species_Maps_Data.html

Critical Habitat Maps & GIS Data:
https://archive.fisheries.noaa.gov/wcr/maps_data/endangered_species_act_critical_habitat.html

ESA Species & Critical Habitat Mapper Web Application:
https://www.webapps.nwfsc.noaa.gov/portal/apps/webappviewer/index.html?id=7514c715b8594944a6e468dd25aaacc9

Determining Effect Level

Question 1: No ESA-listed species, or designated critical habitat covered by National Marine Fisheries Service (NMFS) currently (November 2019) fall within Ferry, Lincoln, Pend Oreille, Stevens, or Spokane Counties. Is the project located within one of these counties?

☐ **YES, the construction footprint and action area are within one of these counties**. No listed species or critical habitat is present in these counties. If the action area does not extend into another county where listed species and critical habitat are present, there is *No Effect* and no need to consult with NMFS. (Consultation with Fish and Wildlife Service may still be necessary.)

- ☐ Record your determination of No Effect on species or habitats covered by NMFS, and maintain this documentation in your Environmental Review Record.
- ☐ Include a statement to your determination explaining that your project is not located within one of the counties covered by NMFS.
- ☐ CONSULTATION UNDER MSA MAY STILL BE NECESSARY, SEE PART C.

☐ **NO, the construction footprint or action area is located outside these counties.** Continue to Step 2

Step 2: Determine Effect

Use the guidance below and Table A to help you determine whether the project qualifies for a "no effect" determination. The guidance provides separate sections for USFWS and NMFS to emphasize the need to consider both. However, the process and standards are similar.

No Effect: If the project is within the geographic range of species and/or critical habitat but project effects will not overlap with or reach listed species or critical habitat at all, the no exposure will occur. A "no effect" may be determined and no consultation is required.

Document the basis of the "no effect" on listed species and critical habitat for HUD's records. This satisfies HUDs and the RE's obligation to ensure actions it authorizes, funds, or carries out do not jeopardize the continued existence of listed species or adversely modify designated critical habitat.

Question 2: Is the project listed in Table A, and does it meet all parameters and conditions?

☐ **YES, the project is listed in Table A and it meets all parameters and conditions**. No effects are likely to reach species or critical habitat. Therefore, there is *No Effect* and no need to consult with NMFS. (Consultation with Fish and Wildlife Service may still be necessary.)

- ☐ Record your determination of No Effect on species or habitats covered by NMFS, and maintain this documentation in your Environmental Review Record.
- ☐ Include a statement to your determination explaining that your project meets all parameters and conditions in Table A.

☐ **NO, the project is not listed in Table A, or does not meet all parameters and conditions.** Continue to Question 3.

Question 3: Would the project effects overlap with federally-listed species or designated critical habitat covered by NMFS?

Consider all effects (direct and indirect, from construction, operation, and maintenance) of the project within the action area. The action area encompasses all the effects of the project, including those that occur beyond the boundaries of the property (such as noise, air pollution, water quality, stormwater discharge, visual disturbance).

☐ **NO, the project and all effects will not reach areas where listed or species are present, nor reach designated critical habitat covered by NMFS**. Therefore, the project will have *No Effect* on ESA-listed species, or designated critical habitat.

- ☐ Record your determination of *No Effect* on species or habitats covered by NMFS and maintain this documentation in your Environmental Review Record.
- ☐ Include a statement explaining how you determined that your project's effects do not

overlap with species or habitat covered by NMFS.

☐ **YES, project effects may overlap with ESA-listed species or designated critical habitat covered by NMFS**. Therefore, your project *may affect* species and habitat..

Table A Potential No Effect Categories and Required Criteria

Potential No Effect Activity Category with required performance criteria
Purchase building or property: • No change to existing structures. • No new impervious surface area constructed.[i] • No modification to existing stormwater collection or drainage patterns.
Landscaping, including adding sprinkler systems • Does not result in fill of jurisdictional waters or the nation or waters of the state, except if proposed for the purposes of species habitat restoration or enhancement.. • Does not remove -riparian[9] vegetation or trees within 150 feet of an aquatic resource. [10] • Any new plantings shall be comprised of native species approved by the local jurisdiction. No planting of invasive species is permitted. • No use of pesticides, herbicides within 150 feet of an aquatic resource, or 24 hours prior to heavy storm events. • Outside lighting must not illuminate aquatic resources occupied by listed species. • Does not increase hardscape area unless an equal area of impervious surface area is converted to pervious surface.. • Directs sprinkler spray away from pollution generating impervious surfaces.[11]
Interior rehabilitation • Applies only to existing structures. • Access and staging, and source sites, have been assessed as part of the proposed action. The sites are located at least 150 feet away from any aquatic resources and include BMPs to prevent discharge of contaminants entering waterbodies or stormwater systems (e.g., filter fabrics in catch basins, sediment traps, etc.).No plantings of invasive species. • Disposal sites are approved for materials to be received. Waste materials are recycled or otherwise disposed of in an EPA approved sanitary or hazardous waste disposal site.

[9] Riparian zones are the areas bordering rivers and other bodies of surface water. They include the floodplain as well as the riparian buffers adjacent to the floodplain. Riparian zones are visually defined by a greenbelt with a characteristic suite of plants that are adapted to and depend on the shallow water table.

[10] An aquatic resource, for the purposes of this opinion, includes: streams, rivers, ponds, lakes, wetlands, estuaries, bays, or other tidally influenced marine areas.

[11] A pollution generating surface, as used in this opinion, is a surface upon which motorized vehicles travel. Examples include, but are not limited to: parking lots, driveways, and roads.

Potential No Effect Activity Category with required performance criteria
Any exterior repair or improvement that will not increase post-construction runoff • Does not increase amount of impervious surface area. • Does not replace existing roof with new hot tar roofing methods, torch down roofing method, treated wood, copper, or galvanized metal.[12] • Does not replace existing siding with galvanized sheeting. • Does not install, repair, or replace exterior artificial lighting on properties adjacent to aquatic resources that support ESA-listed species. • Disposal sites are approved for materials to be received. Waste materials are recycled or otherwise disposed of in an approved sanitary or hazardous waste disposal site. • Exterior repair or improvements to an existing structure located within a Special Flood Hazard Area (100 year floodplain), does not increase structure footprint/does not reduce the amount of flood storage capacity, or remove native riparian vegetation. • Access and staging, and source sites have been assessed as part of the proposed action. The sites are located at least 150 feet away from the aquatic resource and include BMPs to prevent discharge of contaminants from entering waterbodies or stormwater systems (e.g., filter fabrics in catch basins, sediment traps, etc.).

2 Species under FWS jurisdiction include some that occur in the previously disturbed and built environment; HUD and its responsible entities must evaluate potential effects to all of the FWS species that occur, or potentially occur, in the action area; contact the nearest FWS Field Office with any related questions.

Part B - Initiating Section 7 Consultation

To initiate informal or formal consultation with NMFS west of the Cascades submit electronic materials to HUD-wa.wcr@noaa.gov This is a general email inbox that is monitored by NMFS for consultation requests. East of the Cascades, submit requests to CRBO.ConsultationRequest.WCR@noaa.gov

National Marine Fisheries Service
For General Questions:

- Eastern Washington (509) 962-8911x802
- North Puget Sound (206) 526-4505
- Central Puget Sound (360) 753-6054
- Coastal Washington/Lower Columbia River (360) 534-9306

12 ~~Galvanized flashing, gutters, or f~~asteners may be utilized as part of roofing systems, so long as they are coated or painted to prevent exposure to precipitation.

Part C: Essential Fish Habitat Consultation with National Marine Fisheries Service

Essential fish habitat (EFH) means those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. For the purpose of interpreting the definition of essential fish habitat, "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem.

MSA Consultation Requirements:
Section 305(b) of the MSA directs Federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect essential fish habitat (EFH). The MSA (section 3) defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For the purpose of interpreting this definition of EFH: "Waters" include aquatic areas and their associated physical, chemical, and biological properties that are used by fish and may include aquatic areas historically used by fish where appropriate; "substrate" includes sediment, hard bottom, structures underlying the waters, and associated biological communities; "necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem; and "spawning, breeding, feeding, or growth to maturity" covers a species' full life cycle (50 CFR 600.10).

The MSA requires Regional Fishery Management Council (Council) to designate EFH for each life stage of the species that are managed under their fishery management plans (FMP). In Washington, EFH is described and identified in the FMPS for four fisheries managed by the Pacific Fishery Management Council (PFMC):

- Pacific Coast salmon (chinook salmon, coho salmon, and Puget Sound pink salmon)(PFMC 2014);
- Pacific Coast groundfish (e.g., rockfishes, flatfishes, cods) (PFMC 2016);
- coastal pelagic species (e.g., northern anchovy, Pacific sardine, market squid) (PFMC 1998); and
- Highly migratory species (e.g., tunas and sharks)(PFMC 2007).

In addition to designating EFH, the PFMC has designated "habitat areas of particular concern", or HAPCs, for both salmon and groundfishes (Table 2, see PFMC 2014 and PFMC 2016 for detailed descriptions of the HAPCs). HAPCs are specific areas or habitat types within EFH that of high ecological importance, sensitive to human-induced degradation, the extent to which they are under stress from human activities, or are rare. Although the designation as a HAPCs confers no specific regulatory protection on those habitats, it does highlight those habitats as priority areas for conservation and management. During the EFH consultation process, adverse effects on HAPCs should be subject to a higher level of scrutiny.

Habitat areas of particular concern (HAPCs) in the salmon and groundfish fishery management plans (FMPs)

FMP	Pacific Coast Groundfish	Pacific Coast Salmon
HAPC	Estuaries	Complex channels and floodplains
	Rocky reefs	Thermal refugia
	Canopy kelp	Spawning habitat
	Seagrasses	Estuaries
	Areas of Interest	Marine and estuarine submerged aquatic vegetation

MSA Effects Determination
As with ESA consultation, the federal agency must make a preliminary analysis of direct and indirect effects of project activities and whether EFH may be adversely affected. If no EFH would be adversely affected, then a "No Adverse Affect" call may be reached. If any adverse effect could occur, then Federal agency (or here the RE) must make a preliminary effect determination of "May Adversely Affect."

Adverse effect means any impact that reduces quality or quantity of EFH, and may include direct or indirect physical, chemical, or biological alteration of the waters or substrate and loss of (or injury to) benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality or quantity of EFH. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. [50 CFR 600.810(a)].

Step 1: Determine whether EFH and HAPCs are present.
Obtain a list of EFH and HAPC present in the entire action area of your project.

For NMFS West Coast Region EFH information go to:
EFH and HAPC Map: https://www.habitat.noaa.gov/application/efhmapper/index.html
EFH and HAPC descriptions for each species:
https://www.fisheries.noaa.gov/west-coast/habitat-conservation/essential-fish-habitat-west-coast
General HAPC information: https://www.fisheries.noaa.gov/west-coast/habitat-conservation/habitat-areas-particular-concern-west-coast

Question 1: Does the area affected by the action overlap with EFH

☐ NO, the construction footprint project and action area do not overlap with. The project will Not Adversely Affect EFH or HAPCs. There is no need to consult with NMFS.

☐ YES, the construction footprint or action area overlaps with EFH. Continue to Question 2

Question 2: Is the project listed in Table A, and does it meet all parameters and conditions?

☐ YES, the project is listed in Table A and it meets all parameters and conditions. The project will Not Adversely Affect EFH or HAPCs. There is no need to consult with NMFS.

☐ NO, the project is not listed in Table A, or does not meet all parameters and conditions. Continue to Step 2.

Step 2: Determine Effect Exposure.

Question 3: Would the project result in adverse effects (as defined above) to EFH?

☐ NO, the project will not result in adverse effects. The project will Not Adversely Affect EFH. There is no need to consult with NMFS.

☐ YES, the project may result in adverse effects. EFH consultation is required.

☐ Please send a request for EFH consultation and an EFH Assessment. The EFH Assessment may be incorporated into Biological Assessments, Biological Evaluations, NEPA documents, etc. prepared for the project. The level of detail in the assessment should be commensurate with the complexity and magnitude of the potential adverse effects of the action. The EFH Assessment must include the following information [50 CFR 600.920€(3):

- Description of the action.
- An analysis of the potential adverse effects of the action on EFH and the managed species. Special attention should be given to any HAPCs that may be adversely affected.
- HUD's conclusion regarding the effects of the actions on EFH
- Proposed mitigation, if applicable. This includes measures to avoid, minimize, mitigate or otherwise offset the adverse effects of the action on EFH.

If appropriate, the assessment should also include [50 CFR 600.920(e)4)]:

- the results of on-site inspections to evaluate the habitat and site-specific effects of the action
- the views of recognized experts on the habitat or species that may be affected
- a review of pertinent literature and related information
- an analysis of alternatives to the action.

For technical questions about EFH contact:
John Stadler - West Coast EFH Coordinator
john.stadler@noaa.gov
(360) 534-9328


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Columbia

Appendix B
Materials and Landscape Design Criteria
To Satisfy Programmatic Terms and Conditions for Increased use of LID

ROOF AND GUTTERS: Based on information in the Washington State Department of Ecology's "**Roofing Materials Assessment: Investigation of Toxic Chemicals in Roof Runoff from Constructed Panels in 2013 and 2014**" – Publication Number 14-03-033, the following criteria are the applicable minimization measures for roofing and gutters:

- No use of copper roofing or treated wood shingle roofing.
- Galvanized metals in roofing or gutters must be painted to prevent rain from introducing zinc into the runoff. If paint begins to flake or peel, paint must be refreshed.
- Composite (3-tab) roofing without moss inhibitor is preferred for Single Family and Duplexes.
- Multifamily or commercial style buildings with rooftop HVAC equipment shall place such HVAC equipment under a roofed structure to prevent rain from introducing zinc into the runoff.

HARDSCAPE: Based on information in **Brattebo and Booth, 2003** ("Long-term stormwater quantity and quality performance of permeable pavement systems" Water Research 37:4369-4376) and in **Fassman and Blackbourn 2010** ("Urban Runoff Mitigation by a Permeable Pavement System over Impermeable Soils" Journal of Hydrologic Engineering) and in **Drake et al, 2014** ("Stormwater quality of spring-summer-fall effluent from three partial infiltration permeable pavement systems and conventional asphalt pavement" Journal of Environmental Management 139:69-79) and in **Alizadehtazi et al 2016** ("Comparison of Observed Infiltration Rates of Different Permeable Urban Surfaces Using a Cornell Sprinkle Infiltrometer" J. of Hydrol. Eng. 06016003-1), the following criteria are the applicable minimization measures for hardscape areas:

Driveways, parking pads (above ground), sidewalks and patios shall incorporate pervious materials to the maximum extent. Appropriate pervious materials are:

- Pervious Concrete
- Permeable interlocking concrete pavers
- Porous Asphalt

4.

0. ONSITE STORMWATER TREATMENT – Roof runoff: Based on information in **Skaloud 2016** ("Stormwater treatment through planter boxes for contaminants originating from metal roofs at the Annacis Island Warehouse" University of British Columbia. Open Collections, Undergraduate Research.), and in downspout rain filter boxes should be incorporated into landscaping and building design to reduce metals and depositional contaminants from leaving the site in stormwater runoff. Downspout rain box types include:

5.

- Grattix Box
- Splash Boxx

- Downspout dispersal to grass is an alternative to rainboxes
- Green roofs or eco-roofs are an acceptable alternative to downspout treatment and retention.

ONSITE STORMWATER TREATMENT – Roads, driveways, and parking lots (above ground) runoff: Based on information in **Hinmann and Washington Dep't of Ecology 2013** ("Rain Garden Handbook for Western Washington; A guide for Design, Maintenance, and Installation"), where the proposal includes access roads, or open air parking for more than 4 vehicles, biofiltration should be incorporated into landscaping design to reduce contaminants from leaving the site in stormwater runoff. Options for biofiltration include:

- Bioretention cells
- Tree box filters
- Rain gardens
- Bioswales

Where site constraints and building design cannot accommodate LID approaches, refer to Appendix C.

Additional Low-Impact Development (LID) Resource Documents are available at

Whole Building Design Guide, a program of the National Institute of Building Sciences, https://www.wbdg.org/resources/low-impact-development-technologies?r=landscape sitesecurity

Hinman, C. 2005. Low Impact Development: Technical Guidance Manual for Puget Sound. A Report for the Puget Sound Action Team and Washington State University, Pierce County Extension. Olympia, Washington. (January)

National Association of Home Builders. 2003. The Practice of LID Development. A Report for HUD and the Partnership for Advancing Technology in Housing. 2003. Washington, D.C. (July)

Transportation Research Board. 2006. National Cooperative Highway Research Program (NCHRP) Report 565. Evaluation of Best Management Practices for Highway Runoff Control. Washington, D.C.

U.S. EPA. 2000. Low-Impact Development (LID): A Literature Review. Office of Water, Washington, D.C. (October)

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Washington State Department of Ecology. 2019. Stormwater Management Manual for Eastern Washington. Water Quality Program. Lacey, Washington. https://fortress.wa.gov/ecy/ezshare/wq/Permits/Flare/2019SWMMEW/2019SWMMEW.htm

Washington State Department of Ecology Low Impact Development Technical Guidance for Western Washington. 2012. Lacey, Washington. https://www.psp.wa.gov/downloads/LID/20121221_LIDmanual_FINAL_secure.pdf

Washington State Department of Ecology Low Impact Development Guidance for Eastern Washington. 2013. Lacey, Washington. https://fortress.wa.gov/ecy/publications/SummaryPages/1310036.html

Appendix C
NMFS Stormwater Criteria for HUD Projects in Washington for use when site constraints prevent use of LID

The following administrative elements and design criteria comprise the actions required of HUD and/or Responsible Entities to comply with the Terms and Conditions detailed in Section 2.9.4 of the Opinion.

1. HUD Environmental Review. To demonstrate compliance with ESA requirements for consultation with NMFS in Washington, the environmental review for a HUD project must include:
   a. An effects determination.
      i. Projects that meet the relevant criteria in Appendix A and Table A qualify as having no effect and require no further consultation.
      ii. Projects that cannot infiltrate 100 percent of the design storm (based on the applicable Washington State Stormwater Manual) on-site are "likely to adversely affect" (LAA) ESA-listed species and critical habitat.
   b. Projects that are "likely to adversely affect" ESA-listed species and critical habitats must also develop and carry out a post-construction stormwater management plan (PCSMP) as described below. These plans must be reviewed and approved by NMFS.

2. NMFS Review and Approval Process. To request NMFS review and approval of a PCSMP, HUD or the RE must submit the proposed stormwater management plan and the Action Notification Form (as described in Appendix F, Part 1 and Part 2) at least 20 days before the anticipated completion of the environmental review for the subject project.

3. Stormwater Management Plan. A PCSMP must include the following information:
   a. All plans, drawings, and the Stormwater Information Form (Appendix B) must be signed by a licensed, professional engineer.
   b. A site map for the project that identifies all:
      i. Impervious areas;
      ii. Low-impact development (LID) practices by type and capacity;
      iii. Manufactured stormwater treatment technologies by type and capacity;
      iv. Other structural source control practices by type and capacity (e.g., special practices for known or suspected contaminated sites); and
      v. All runoff discharge points and conveyance paths to the nearest receiving water.
   c. A description of how those LID and other practices will manage all precipitation on-site up to the design storm, and provide adequate treatment for runoff that will be discharged from the site.
   d. A description of the proposed maintenance activities and schedule for the treatment facilities including the party responsible maintenance and contact information for the responsible party.

e. The name, email address, telephone number of a person responsible for designing the stormwater management facilities so that NMFS may contact that person if additional information is necessary.

4. **Stormwater Management Practices**. Post-construction stormwater management consists of low impact development practices (LID) (water balance) that emphasize the use of on-site features to increase evapotranspiration and infiltration that will improve water quality and reduce hydromodification (i.e., alteration of the natural flow of water through the watershed). Examples of LID practices include:
   a. Minimize impervious area
      i. Share parking spaces
      ii. Minimize pavement widths
      iii. Minimize front setbacks
      iv. Share driveways
      v. Minimize building footprint
      vi. Minimize roadway cross sections
      vii. Minimize new pavement
   b. Limit disturbance
      i. Construction sequencing
      ii. Conserve soils with best drainage
      iii. Cluster development
      iv. Tree protection
      v. Minimal foundation
   c. Landscape and hardscape areas
      i. Restored soils
      ii. Tree planting
      iii. De-pave existing pavement
      iv. Contained stormwater planters
      v. Vegetated roof
      vi. Porous pavement
      vii. Infiltration garden
      viii. Soakage trench
      ix. Drywell
      x. Water quality conveyance swale
      xi. Vegetated filter strips
      xii. Downspout disconnection
      xiii. Lined rain garden, LID swale, Stormwater planter

5. Design Storm. All stormwater treatment practices and facilities that result in off-site conveyance must be designed to accept and provide water quality treatment for the design storm, as through the use of the Western Washington Hydrology Model (WWHM)[13] or equivalent continuous flow model.

[13] https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals/Western-Washington-Hydrology-Model

6. Conveyance. When conveyance is necessary to discharge treated stormwater directly into surface water or a wetland, the following requirements apply:
   a. Maintain natural drainage patterns.
   b. To the maximum extent feasible, ensure that water quality treatment for the HUD funded project is completed before commingling with offsite runoff during conveyance.
   c. Prevent erosion of the flow path from the project to the receiving water and, if necessary, provide a discharge facility made entirely of manufactured elements (e.g., pipes, ditches, discharge facility protection) that extends at least to ordinary high water.

7. Action Completion Report. HUD or the RE must submit the Project Completion Report (Appendix D, Part 3) within 60-days of end of construction. The Project Completion Report should include all information necessary to document that the project was constructed in compliance with the provisions of this opinion, including such materials as final plans or as-built drawings.

8. Failure to Report May Trigger Reinitiation. NMFS may recommend reinitiation of this consultation if HUD or the RE fails to provide all applicable notifications and completion reports or fails to attend quarterly and annual meetings, as specified.

APPENDIX D: Action Notification Form and Email for Program Compliance

For Use with the HUD Programmatic Opinion

July 21, 2020

Use of the HUD Programmatic E-mail Box

Use the HUD programmatic e-mail box at HUD-wa.wcr@noaa.gov or east of the Cascades, submit requests to: HUD-CRBO.ConsultationRequest.WCR@noaa.gov to request that NMFS review and approve the post-construction stormwater management plan (PCSMP) for a HUD funded project, to withdraw a request for review, and to submit the project completion forms.

The mailbox will send you an automatic reply after receipt of any message, but you will not receive any other communication from the programmatic e-mail box. Please direct all other communications or questions to the appropriate NMFS biologist or branch chief.

Please only submit one request for review, withdrawal, or completion report per e-mail. Please remember to attach all supporting information, including:

E-mail Title

In the subject line of the email (see below for requirements), clearly the type of action you are requesting (i.e., Action Notification, Withdrawal, etc.), Project Name, Applicant (HUD Office or Responsible Entity) Name, County, and Waterway (to which the project will discharge).

Use caution when entering the necessary information in the subject line. If these titling conventions are not used, NMFS will not accept the e-mail.

Examples:

> *Action Notification: HUD Project Name, Housing & Community Development, King County, Tolt River*
>
> *Withdrawal: HUD Project Name, City of Tacoma, Pierce County, Puyallup River*
>
> *Project Completion: HUD Project Name, Housing & Community Development, Thurston County, Nisqually River*

Action Notification and Stormwater Information Forms

HUD or the RE must submit an Action Notification Form, a complete Stormwater Information Form, and a complete PCSMP to the HUD programmatic e-mailbox to request that NMFS review and approve the PCSMP for a HUD project. Within 7 calendar days, NMFS will tell the requestor which staff person was assigned to complete the review, and within 30 calendar days NMFS will determine whether the proposed stormwater plan is approved or not.

If asked, the consultation biologist will provide an estimate of the time necessary to complete the review based on the complexity of the proposed action and work load considerations at the time of the request.
NMFS may delay its review if the Action Notification Form, the Stormwater Information Form, or the PCSMP is incomplete or unsatisfactory. Please contact NMFS early during the development phase of a project if you have any questions about how these guidelines may affect your project.

Withdrawing a Request for Review
If it is necessary to withdraw a request for review, submit a separate email with the word WITHRAWN at the beginning of the e-mail subject line, but otherwise follow the email titling conventions as described above. State the reason for the withdrawal in the email. If HUD or an RE re-submits a request for NMFS review that has been previously withdrawn, NMFS will process the resubmittal as if it was a new action notification.

Action Completion Report. HUD or the RE must submit the Action Completion Form to NMFS within 60 days of finishing construction of the stormwater management facilities for a HUD project. Failure to submit the action completion form may result in NMFS recommending reinitiation of this consultation.

Action Notification Form

HUD Programmatic Opinion

Submit this form to NMFS 20 days prior to the anticipated completion of the project's environmental review. Submit by email to: HUD-wa.wcr@noaa.gov or east of the Cascades, submit requests to: HUD-CRBO.ConsultationRequest.WCR@noaa.gov

DATE OF REQUEST		**NMFS TRACKING # WCR- 2020-00512**		
Project Name				
Consultation Type	☐ ESA ONLY	☐ EFH ONLY	☐ BOTH ESA & EFH	
HUD Office/Responsible Entity	HUD /			
	Name:			
	Phone:			
	Email:			
6th Field HUC & Name				
Latitude & Longitude (in signed degrees format: DDD.dddd)				
Proposed Construction Period:	***Start Date:***		***End Date:***	

NMFS Species & Critical Habitat Present in Action Area

ESA-listed species occurring in the action area		
Snake/Columbia River System	**Snake/Columbia River System con't**	**Puget Sound Region**
❑Snake River spring/ summer Chinook ❑Snake River fall chinook ❑SR Spring/ summer-run Chinook ❑SR sockeye ❑Upper Col R. Spring/ summer-run Chinook ❑Upper Col R. Steelhead ❑Mid Col R. Steelhead ❑Lower Col R. Chinook ❑Col R. Chum	❑ Lower Col R. Steelhead ❑ Upper Wil. R. Chinook ❑ Upper Wil. R. Steelhead ❑ Green Sturgeon ❑ Eulachon ❑ SRKW ❑ Humpback Whales ❑ Lower Col R. Coho	❑ SRKW ❑ Humpback Whales ❑ Puget Sound Chinook Salmon ❑ Puget Sound Steelhead ❑ Hood Canal Summer run Chum ❑ Yelloweye Rockfish ❑ Bocaccio Rockfish
EFH Species occurring in the action area		
❑Pacific Salmon, Chinook		❑Coastal Pelagics
❑Pacific Salmon, coho		❑Groundfish
Project Description		

ESA-listed species occurring in the action area		
Add more rows or attach additional pages, as necessary		

Stormwater Information Form

HUD Programmatic Opinion

If you are submitting a project that includes a stormwater plan for review, please fill out the following cover sheet **to be included with** any stormwater management plan and any other supporting materials. Submit this form with the Action Implementation Form to NMFS at **HUD-wa.wcr@noaa.gov** or east of the Cascades, submit requests to: HUD-CRBO.ConsultationRequest.WCR@noaa.gov

PROJECT INFORMATION	NMFS TRACKING # WCR- (NUMBER PROVIDED BY NMFS)	
Name of Project		
Street Address of Project		
Lat/Long of Project Location (DDD.dddd)		
Type of project (i.e., single family residential, multi family residential, associated infrastructure, etc.)		
Nearest receiving water occupied by ESA-listed species or designated critical habitat		
Have you contacted anyone at NMFS?	0 **Yes** 0 **No**	**If Yes, Who:**
Applicant/Consultant name		
Applicant/Consultant email		

STORMWATER DESIGNER AND/OR ENGINEER CONTACT INFORMATION	
Name:	
Phone:	
Email:	

SUMMARY OF DESIGN ELEMENTS		
1	**Design storm as calculated by continuous flow model** https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals/Western-Washington-Hydrology-Model#latest	_____ **Inches** _____ **cfs**
2	**Is the design storm fully treated** https://ecology.wa.gov/Regulations-Permits/Guidance-technical-assistance/Stormwater-permittee-guidance-resources/Stormwater-manuals/Western-Washington-Hydrology-Model	0 **Yes** 0 **No**

PROJECT INFORMATION	NMFS TRACKING # WCR- (NUMBER PROVIDED BY NMFS)

SUMMARY OF DESIGN ELEMENTS (CONTINUED)

3	**Total contributing impervious area including all contiguous surface** (e.g. roads, driveways, parking lots, sidewalks, roofs, and similar surfaces)	**_____ Acres**	
	Proposed new impervious area	**_____ Acres**	
	Existing impervious area	**_____ Acres**	
	Acres of total impervious area x design storm = ft³ to be treated		
4	**Peak discharge of design storm**	**_____ cfs**	
5	**Total stormwater to be treated**	**_____ ft³**	**_____ cfs**
7	**Have you treated all stormwater to the design storm within the contributing impervious area?** **If no, why not, and how will you offset the effects from remaining stormwater?**	☐ **Yes** ☐ **No**	

WATER QUALITY

8	**Low Impact Development (LID) methods incorporated?** (e.g. site layout, vegetation and soil protection, reforestation, integrated management practices such as amended soils, bioretention, permeable pavement, rainwater collection, tree retention) **Please describe:** **How much of total stormwater is treated using LID**	☐ **Yes** ☐ **No** **%** **ft^3**

WATER QUALITY (CONTINUED)

9	**Treatment train, including pretreatment and bioretention methods used to treat water quality** **Why this treatment train was chosen for the project site** **Page in stormwater plan where more details can be found**	

WATER QUANTITY

10	**Does the project discharge directly into a major water body*?** If yes, detention not required *Columbia River, large lakes, ocean (verify with NOAA)	☐ **Yes** ☐ **No**

11		**10-year storm**	_____ **cfs**
	Post-development runoff rate (i.e., after proposed developments)	**Water quality design storm**	_____ **cfs**
		10-year storm	_____ **cfs**

Pre-development runoff rate (i.e., before human-induced changes to the unimproved property)	**Water quality design storm**	**_____ cfs**

WATER QUALITY

	Post-development runoff rate must be less than or equal to pre-development runoff rate
12	**Methods used to treat water quantity** **Page in stormwater plan where more details can be found**

MAINTENANCE AND INSPECTION PLAN

13	**Have you included a stormwater maintenance plan with a description of the onsite stormwater system, inspection schedule and process, maintenance activities, legal and financial responsibility, and inspection and maintenance logs?** **Page in stormwater plan where plan can be found**	☐ **Yes** ☐ **No*** *NOAA review cannot be complete without a main-tenance and inspection plan.

14 **Contact information for the party/parties that will be legally responsible for performing the inspections and maintenance or the stormwater facilities:**

Name	
Responsibility	
Phone	
Email	
Name	
Responsibility	
Phone	
Email	

MAINTENANCE AND INSPECTION PLAN

Name	
Responsibility	
Phone	
Email	

OTHER RELEVANT INFORMATION

Action Completion Report

Submit this form within 60 days of completing all work to NMFS at HUD-wa.wcr@noaa.gov or east of the Cascades, submit requests to: HUD-CRBO.ConsultationRequest.WCR@noaa.gov

DATE OF NOTIFICATION		**NMFS TRACKING # WCR-** **(NUMBER PROVIDED BY NMFS)**
Project Name		
HUD Office/Responsible Entity	/	
Responsible Entity Contact	Name:	
	Phone:	
	Email:	
Construction Completion Date		

Please include the following:

1 **An explanation of the stormwater system as built or installed by the construction contractor, including any on-site changes from the original plans.**

Add more rows, as necessary

2 **Photographs of the constructed stormwater facility, including photos of the outfall structure, vegetation, facility location relative to other site features, etc.**

3 **A map showing the stormwater facility's location(s)**

4 **As built design drawings for the stormwater facility and site stormwater collection system (PDF versions only please. No CAD files)**

[i] Impervious surface includes hardscape, sidewalks, driveways, parking areas, and roofing.